Determination of Public Land (Rangeland) Health for 62014 RALPH M. KING

The Record of Decision (ROD) for the New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (dated January 2001) adopted three Standards for Public Land Health. These are (1) Upland Sites Standard, (2) Biotic Communities, Including Native, Threatened, Endangered, and Special Status Species Standard and (3) Riparian Sites Standard.

The ROD also established a process for the BLM Field Offices for implementation. Through a public participation process, the Roswell Field Office developed and adopted indicators to use in conjunction with existing monitoring data to assess these standards.

Field assessment worksheets and other available data that evaluate the local indicators were completed for this allotment. Based on these assessments, it is my determination that public land within Tucker Place allotment #61005, meets the (1) Upland Sites standard and (2) Biotic Communities, including Native, Threatened, Endangered, and Special Status Species standard. There are no public land Riparian areas on this allotment, therefore this standard was not addressed.

/s/ Eddie Bateson	9/12/2006
Field Manager	Date

Standards of Public Land Health
Evaluation of 62014 RALPH M. KING Allotment
[05/04/2006]

The Roswell Field Office conducted a Rangeland Health Assessment at one (1) study site within allotment #62014 Ralph M. King. This assessment evaluated Soil/Site Stability, Hydrologic Function and Biotic Integrity indicators within this study site and vicinity. Existing monitoring data was incorporated into and in support of this field assessment. A summary of this assessment is attached and shown in the following table.

Study Area or Assessment Area	UPLAND			BIOTIC			RIPARIAN		
	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet
62014-IDSU-A022	X			X			N/A		

Twenty-two (22) indicators for Rangeland Health were evaluated for public land on Ralph M. King allotment #62014. Ten of these assessed soil site stability, 11 hydrologic function and 13 biotic integrity. These qualitative assessments in conjunction with quantitative information gathered from previous data collected on one location were utilized to assess rangeland health of public land within this allotment. This allotment is a "C" (custodial) category due to small amounts of public land present.

Recent dry conditions have impacted this allotment over the last several years. This isolated 80 acres/32 hectares of public land is divided by steep upland and flatter topography eastward in Guadalupe county. This HP-2 Shallow ecological site is located south of Alamogordo Creek and Valley encompassing 20 acres/8.1 hectares of the original 80. Soil is Slaughter series classified as clayey, superactive thermic, shallow Petrocalcic Paleustolls and shallow to a petrocalcic horizon. They formed in alluvium derived from the Ogallala Formation found on edges of plains in eastern Guadalupe county. Elevation is between 4,000 ft/1,212 m and 5,300 ft/1,606 m on 0 to 2 percent slopes. Livestock were present at evaluation with raptor; red-tailed hawk (Buteo jamaicensis), ungulates pronghorn (Antilocapra americana) and mule deer (Odocoileus hemionus) observed as well.

Blue grama (Bouteloua gracilis) was the predominant grass observed with lesser amounts of muhlys (Muhlenbergia spp.). Juniper (Juniperus spp.), yucca (Yucca spp.) and cholla (Opuntia imbricata) are the chief shrub components. All indicators exhibited normal range of variability with exception invasive plants and annual production, both indicating Moderate departure. Due to an onset of dry weather with cholla and juniper encroachment, annual production is down at a 300 lbs/ac or kg/ha estimate. Sod formed along with fibrous rooting from gramas and other grass holds soil in place and forms a protective mat to curtail erosion. Although not as vigorous, blue grama still holds steady

in a turflike state. All hydrological attributes remain in None to Slight and Slight to Moderate departure which suggests a correlation with vegetative ground cover.

Wildlife - Evaluation of the integrity of biotic community considered several indicators as attribute indices for the area of interest. Biotic indicators are interrelated with several other indicators, including soil/site stability, hydrologic function, and vegetation. Several indicators are singularly biotic and address vegetative aspects of the ecological site description, such as functional/structural groups and plant mortality & decadence. Due to some juniper and cholla infestation, perennial grass and forb production is down. Raptors utilize the prey base, ie, small mammals and herps suggesting ample energy flow cycling in out of the system. No Special Status Species Habitat or Population concerns exist currently on this allotment.

It is the professional opinion of the Assessment Team, public land within allotment #62014 Ralph M. King meets Upland and Biotic Standards. There are no Riparian issues present therefore this standard was not addressed. See site notes, comments and recommendations for further information regarding this assessment.

Recommendations: Carrying capacity for livestock is ample here taking into account terrain and climate. Sheep and pronghorn could best utilize this site due to forb potential. Forbs are somewhat declining but should rebound along with grass species with an onset of wetter conditions. At present, deferred grazing varying seasons of rest and use during successive years is necessary to maintain a healthy vegetative community. Growing season deferment should be employed for warm season vegetation to establish and dormant season conservative grazing for those cool season varieties.

Brush control to thin out those stands of juniper and cholla is recommended if these species begin to inhibit forage production. No immediate threat exists but potential for further encroachment may warrant closer monitoring on more regular intervals. Opening up canopy and ground cover would only serve to increase forage production creating greater water infiltration and less runoff. Allowing grass components to proliferate while developing reproductive and vegetative tillers should also reduce erosion potential.

This isolated 80 acre/32 hectare tract should be earmarked for disposal either by land exchange or sale if not already identified. Administratively and logistically, this would help to concentrate efforts from the private and Federal sectors to manage their respective parcels more effectively. Just taking into account these land-locked tracts with no legal access should serve as strong criteria for disposal.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 62014-IDSU-A022			
Legal Land Desc	NENE 1 0070N 0260E Meridian 23	Acreage	20
Ecosite	077BY031NM SHALLOW HP-2	Photo Taken	Y
Watershed	13060001230 ALAMOGORDO		
Observers	ARTHUN/MCFERRAZ	Observation Date	05/23/2006
County Soil Survey	NM019 GUADALUPE	Soil Var/Taxad	
Soil Map Unit	121	Soil Taxon Name	SLAUGHTER
Texture Class	NM019 L	Soil Phase	SLAUGHTER
Texture Modifier	NM019 LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	12.31	NOAA Growing Season Precipitation	9.22
NOAA Avg Annual Precipitation	10.69	NOAA Avg Growing Season Precipitation	8.85
Disturbances and Animal Use:	livestock present; red-tailed hawk; deer and pronghorn sheds;quail-		

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns					X
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground					X
Comments:	current estimate is 30%					
S H	Gullies					X

Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement					X
Comments:						
S H B	Soil Surface Resistance to Erosion				X	
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups				X	
Comments:						
B	Plant Mortality/Decadence				X	
Comments:						
H B	Litter Amount					X
Comments:	30-35% is current estimate					
B	Annual Production			X		
Comments:	300 lbs/ac or kg/ha is the current estimate					
B	Invasive Plants			X		
Comments:	cholla is up-juniper encroachment					
B	Reproductive Capability of Perennial Plants				X	
Comments:	10% have visible seed heads-					
S	Physical/Chemical/Biological Crusts				X	
Comments:	lacking bio-crusts					
B	Wildlife Habitat				X	
Comments:						
B	Wildlife Populations				X	
Comments:						
B	Special Status Species Habitat					X

Comments:	No special status species habitat concerns occur.					
B	Special Status Species Populations					X
Comments:	No special status species populations concerns occur.					

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	4	6
H	Hydrologic	0	0	0	3	8
B	Biotic	0	0	2	7	4

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info,* and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	0	11
Biotic		0	2	11

Site Notes: Site gps'd; trend plot set with rebar and t-post; double-sampling and step-point transects run; photos taken also. This site exhibits a dormant turflike appearance because of blue grama's nature in a slightly deteriorated state. Cholla and juniper are encroaching steadily and eventually inhibit perennial grass production.

Deer, prongorn and hawks were also observed. This site is at the edge of steep country.


DATE 5-23-06
FO RFO
ALLOT #62014
PASTURE A022
VEGID# 22
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